COAT exposed HARDWARE WITH LPS PROCYON.

A/R LPS PROCYON BATCH: MILL 596

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORI	MANCE / UP	DATE			* * * **
											QA Closed	Date:	<u></u>
Work Ord	lor.					DISPOSITION				AGAINST D	PARTMENT	/PROCESS	•
Work Ord	ici.					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering
Part	No.					Scrap	1		Machining	Small Fab	Pro	od. Eng. Coor.	Quality
			-			Use-as-is	1		noforming	Finishing	-4	re/Packaging	Other
NCR	No.					Work Order Update]		Large Fab	Composite]	Supplier	
											· · · · · · · · · · · · · · · · · · ·		
Root					1	ption of work order update		Initial		tion	Sign &		
Cause	,	Date	Step	Qty	(or Non-conformance	Cr	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training									:				
Unapproved		<u>_</u>											
						F	AUL	T CATE	GORY				
Landi	ng (Gear				General	_	_		_	_		•
		Bending				Bend		Grain		<u></u>	Ovalized		Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	ire		Over/Unde	r tolerance	Temperature/Cure
l ·		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ect	Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread Offset Part Lost/Missing

Power Loss/Surge

Part Moved
Positioned Wrong

Wrong Stock Pulled

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

					one. In the state of the state				
Work Orde				*901	55*				Page 2
Item ID: Revision ID:	D412-630-0	033		Accept	*N900040	100*	Setup Star	17.	S1*
Item Name:	Heli Access S	Step LH Folding					Sto	° *N:	S2*
Start Date: Required Date:	11/14/12 11/14/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item ID: Customer:				
Reference:						_	Run Stai	t walr	74+
Approvals:	Process Pl	an:	Date:	Tooling:	Date:			"1711	₹1 ^
	QC:		Date:	_ SPC (Y/N):	Date:		Sto	° *NF	₹2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID Tool #	Plan Accept Code Qty	Reject Qty	Reject Number	Insp. Stamp
120		QC5- Inspect part compl	eteness to step on W/O	0.00					
120 QC Quality Control		Memo		0.00 (16, j	17/10/17	LH			
130		Pick Kit		0.00					
120 Packaging Packaging		Memo		0.00		2			12/0/038

140

QC4-100% Inspect kits for completeness

140

Quality Control

Memo

0.00 PAG 0.00 16 0.00 17 (10 16

									DQA:	Date:	<u> </u>
NCR: Yes	s / No				WORK ORDER NON-O	CONFORI	MANCE / UI	PDATE	QA Closed:	Date:	• **
					DISPOSITION			AGAINST DE			•
Work Order:	·					,			7)) (- - - - - - - - -	.
Part No.	·				Rework Scrap Use-as-is	4 1	Skid-tube Machining noforming	Crosstube Small Fab Finishing	-1	Water Jet d. Eng. Coor re/Packaging	Engineering Quality Other
NCR No.				· · · · · · · · · · · · · · · · · · ·	Work Order Update] ''''	Large Fab	Composite]	Supplier	
Root				Descrip	otion of work order update	Initial	А	ction	Sign &		
Cause	Date	Step	Qty	o	r Non-conformance	Chief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data											
quip/Tooling							İ				
Operator										,	
Material											
Setup						260					
Other						3/3	-				
Process						*# \$					
Supplier		1									
Training											
Jnapproved											
					F	AULT CATE	GORY				
Landing	Gear				General						

Grain

Hardware

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

Ovalized

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Over/Under tolerance

Pressure/Forced

Weld

Other

Temperature/Cure

Wrong Stock Pulled

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Bending

Cracks

Cuffs

Heat Treat

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Centre Not Concentric to O/S

Bend

Burrs

BOM/Route

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Broken/Damaged

.Work Orde September-13-12				*901	155*							Page 3
Item ID: Revision ID: Item Name:	D412-630-			Accept	*N900	<u>040</u>	100)*	Setup	Start Stop	*NS	1* 2*
Start Date: Required Date: Reference:	11/14/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item I Customer:	ID:					IV.	,
Approvals:	Process P QC:	lan:	Date:	Tooling: SPC (Y/N):	CONTRACTOR OF THE PERSON NAMED IN CO.	ate:			Run	Start Stop	*NR *NR	1* 2*
Sequence ID/ Work Center II 150 *150* Packaging Packaging)	Operation Description Packaging Memo Identify and Location:	pack for shipping as per	Set Up/ Run Hours 0.00 0.00 PPP D412-630-033	Tool ID	Tool#	Plan Code	Accep Qty	ot Re Qu	-	•	sp. amp

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

160

160

Quality Control

10/18 D

									DQA:	Date:	
NCR: Ye	s / No				WORK ORDER NON-C	ONFORM	MANCE / UP	DATE	QA Closed:	Date:	
Work Order:	:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No NCR No					Rework Scrap Use-as-is Work Order Update		Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data									"		
Equip/Tooling											
Operator											
Material											
Setup				٠,							

Landing Gear General Grain Ovalized Pressure/Forced Bending Bend BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Weld Cracks Broken/Damaged Inspection Incomplete Part Incorrect Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Part Moved Maintenance Cuffs Contamination Positioned Wrong Heat Treat Mislabeled Countersink Misread Power Loss/Surge Other Inspection Strip in Tube Cut Too Short Ripples in Bend Drill Holes Offset Out of Calibration Torque Waves in Extrusion Drawing Turning Sequence Out of Sequence Finish Wave/Twist in Tube Folio **Outside Dimensions**

FAULT CATEGORY

Other Process Supplier Training Unapproved

Page 1

Work Order ID:

90155

Parent Item:

D412-630-033

Parent Item Name:

Heli Access Step LH Folding

Start Date: 11/14/12

Required Date: 11/14/12

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP Rev:A New Issue 06-11-08 JLM

IPP rev B ecn 1019, added d2807-041 EC verified by:DD

IPP rev:C 11.01.06 added route seq ID DD vef:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit o Measu		Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2012-107 Clevis		Manufactured	No			110	Each	17.0000	1 89	9927	~ <i>j</i>	- <u>0</u>	
				Location		Loc Qty		Loc Code			· ·		
				WA005		17							
				8586	52	17				· · · · · · · · · · · · · · · · · · ·			
D2803-041		Manufactured	No			110	Each	6.0000	1	2			
Bracket Assembly		Williamaracturea									25	3	wastern market participates of
				Location		Loc Qty		Loc Code			•		
				ST149		6							
				8394	1 6	6			_ 8_	3946			
D2804-041		Manufactured	No			110	Each	2.0000	1	2	L 1 A	!	
Bracket Assembly													Barry' and they been been
				Location		Loc Oty		Loc Code					
				GA		4							
				ST		-4							
				ST149		2			93	935			
•				8393	35	2							
D2807-041 Door prop		Manufactured	No			110	Each	34.0000	2	4 .	- g.B.	12,	10/0-
				Location		Loc Qty		Loc Code			•		
				ST018		30							
				6054	-	2							
				6849		5							
•				8199 8965		3			99	659			
)7	20			_0_/	<u>""" "" "" "" "" "" "" ""</u>			
				ST023	10	4			-				
				8960		4							

NCR:	Yes / No				WORK ORDER NON-O	COI	NFORM	MANCE / UP[DATE			•. • *
										QA Closed:	Date:	
Work Orde	or.				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	•
Part N					Rework Scrap]	i .	Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR N					Use-as-is Work Order Update		Therm	noforming Large Fab	Finishing Composite	1	re/Packaging Supplier	Other
Root				Descri	ption of work order update		Initial	Act	ion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Ct	nief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material							-					
Setup			1									
Other												
Process												
Supplier						1				!		
Training												
Unapproved									,			
					F.	AUL	T CATE	GORY				
Landir	ng Gear				General				<u></u>	•		7
	Bending				Bend		Grain			Ovalized		Pressure/Forced
	Centre No	ot Concer	ntric to C)/s	BOM/Route		Hardwa	re	L	Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	L	Inspecti	on Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs		Instructi	ions Incomplete/U	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance		Part Moved		•
Į	Heat Trea	it			Countersink		Mislabe	led		Positioned V		7
[Inspection	n Strip in	Tube		Cut Too Short		Misread	l		Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes		Offset					
[Torque W	aves in E	xtrusion		Drawing		Out of C	Calibration				

Out of Sequence

Outside Dimensions

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

*September-13-12 2:15:56 PM

. Work Order ID:

90155

Parent Item:

D412-630-033

Parent Item Name:

Heli Access Step LH Folding

Start Date: 11/14/12

Required Date: 11/14/12

Start Qty: 2.00

Required Qty: 2.00

•	D2813 Washer	Manufactured	No		110	Each	7.0000	2	4	Jyb X
				Location ST018 69386 83481	7 1 6		Loc Code	_ よナ [¯]	8348]	3900472
	D3562-041 Step Assembly, LH	Manufactured	No		110 90	Each OG 9	0.0000 2x	1	2	De /10/15
	D3395-1 Bushing	Manufactured	No		110	Each	19.0000	4	8/	rgo
				<u>Location</u> ST041 85431	Loc Oty 19 19		Loc Code	_	85431	
	AN3C21A BOLT	Purchased	No		110	Each	51.0000	2	4	799
				Location ST352 109148 119798 120781 121955	51 2 4 20 25		Loc Code	 	126781	
	AN8C16 Bolt	Purchased	No		110	Each	12.0000	2	4	^L 23
				<u>Location</u> ST342 122928	Loc Qty 12 12		Loc Code	_	122928	
	AN310C8 Nut	Purchased	No		110	Each	22.0000	2	4	gb 12/16/03
				Location ST344 118378 120769 121708	22 2 19		Loc Code	 7 -	120769	

											DQA:	Da	te:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFOR	MANCE / UPI	DATE	•			
											QA Closed:	Da	te:	
Mork Ord	٥٢.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		•
Work Ord	er.					Rework	7	i	Skid-tube	Crosstube]	Water Jet		Engineering
Part	No.					Scrap	1	ļ	Machining	Small Fab	Pro	d. Eng. Coor.		Quality
·				-	·	Use-as-is		1	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR	No.					Work Order Update			Large Fab	Composite		Supplier		
Root		<u> </u>	T T		Descri	ption of work order update	1	Initial	Act	ion	Sign &		_	
Cause		Date	Step	Qty	E .	or Non-conformance	1	nief Eng		ription	Date	 Verificatio	n	QC Inspector
Doc/Data							1			•				
Equip/Tooling		1		:										
Operator							1							
Material														
Setup							1							
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Supplier					•									
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Unapproved							\perp							
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Landi	ng (Gear			_	General	_	,		_	7		_	Ī
	匚	Bending				Bend	\perp	Grain			Ovalized		\vdash	Pressure/Forced
	L	Centre No	ot Concer	ntric to	o/s	BOM/Route	_	Hardwa		<u> </u>	Over/Under			Temperature/Cure
		Cracks				Broken/Damaged	_	1 '	on Incomplete	<u> </u>	Part Incorre		-	Weld
1	1	Crushed/	Crimped.		1	Burrs	1	Instruct	ions Incomplete/U	Jnclear	Part Lost/M	issing	'	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Other

Part Moved Positioned Wrong

Power Loss/Surge

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

*September-13-12 2:15:56 PM

Work Order ID: Parent Item: Parent Item Name:	90155 D412-630-033 Heli Access Step L	.H Folding						Date: 11/14/12 Qty: 2.00		Required Date: 11/14/12 Required Qty: 2.00
MS24665-302 Cotter Pin		Purchased	No		110	Each	152.0000	6	12	V g s
				Location ST309	<u>Loc Qty</u> 152		Loc Code		<u>71</u>	v
NAS1515H3 Washer		Purchased	No	120521	152	Each	106.0000	120:	8	70
				Location ST277 119438 120518 121415 121649	Loc Oty 106 2 26 74 4		Loc Code	1214	15	
NAS1515H5L WASHER		Purchased	No	121049	110	Each	131.0000	4	8	75
				Location FG 103691 ST277 119902 122049	Loc Oty 40 40 91 1 90		Loc Code	7220	— — 549	
NAS1515H8 Washer		Purchased	No		110	Each	25.0000	4	8	-go 12/10/a
				<u>Location</u> ST277 121068	Loc Oty 25 25		Loc Code	12/0	068	, ,

NCR: Y	res / No				WORK ORDER NON-O	100	NFOR	MANCE / UPE	DATE			. , •
										QA Closed:	Date:	
Work Orde	er:				DISPOSITION	1				EPARTMENT		·] =
Part N	lo				Rework Scrap Use-as-is		1	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	lo		· · ·		Work Order Update			Large Fab	Composite		Supplier	
Root				Descri	ption of work order update		nitial	Act	ion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data		ļ										
Equip/Tooling												
Operator												
Material												
Setup						İ						
Other												
Process			.									
Supplier												
Training												
Unapproved			11			<u>.</u>				<u> </u>		
,						AUL	T CATE	GORY				···
Landir	ng Gear				General	_	1		_	7	_	7
	Bending			<u> </u>	Bend	-	Grain		<u> </u>	Ovalized	_	Pressure/Forced
ļ	Centre No	ot Concer	ntric to C)/S	BOM/Route	\vdash	Hardwa		<u> </u>	Over/Under		Temperature/Cure
· ·	Cracks				Broken/Damaged		1 '	on Incomplete	<u> </u>	Part Incorre	}	Weld
Ĺ	Crushed/	Crimped.		<u> </u>	Burrs		ł	ions Incomplete/L	Jnclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte			Part Moved		
Ĺ	Heat Trea	it			Countersink		Mislabe	led		Positioned \		٦
Į	Inspectio	n Strip in	Tube		Cut Too Short		Misread	1	L	Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes		Offset					
	Torque W	aves in E	xtrusion		Drawing		Out of 0	Calibration				

Out of Sequence

Outside Dimensions

Date: ____

DQA:

Turning Sequence

Wave/Twist in Tube

Finish

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*September-13-12 2:15:57 PM

Work Order ID: Parent Item:	90155 D412-630-033							Start	Date: 11/14/12		Required Date	: 11/14/12
Parent Item Name:	Heli Access Step L	H Folding			- 4			Start	Qty: 2.00		Required Qty	2.00
MS21043-3 Nut		Purchased	No			110	Each	770.0000	4	8	43	
				Locatio	<u>n</u>	Loc Qty		Loc Code			V	
				FG		72						
					103691	72						
				ST301		198						
					118077	2						
					118614	7				· · · · · · · · · · · · · · · · · · ·		
					118686	30						
					119758	20			e ser			
					121255 121708	20 119				<u> </u>		
				ST315	121708	500			-			
				31313	122993	500			1229	93		
MS24693-C280		Purchased	No		122))3	110	Each	41.0000	2	<i>حا</i> د 4	i	
Screw		Purchased	110			110	Lacii	41.0000		4	78	12/10/0
				Locatio	n	Loc Qty		Loc Code				,,,
				ST289	_	41						
				51207	120498	16			1204	98		
					121708	25						
02806-0		Manufactured	No			130	Each	35.0000	2	4	v	
Bushing											- g B	
•				Locatio	<u>n</u>	Loc Oty		Loc Code	•		•	
				ST018		35						
					82033	1						
					83943	34			8394	13		
02806-3		Manufactured	No	_		130	Each	16.0000	2	4	~ ^ A	
Bushing											- J.B.	12/10/
				Locatio	<u>n</u>	Loc Qty	-	Loc Code			V	• •
				ST018		16						
					83944	16			839	44		

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-O	COI	NFOR	MANCE / UF	PDATE			
											QA Closed:	Date:	
Work Ord	۰.				,	DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	•
Work Ord	er.					Rework	٦		Skid-tube	Crosstube	1	Water Jet	Engineering
Part I	Nio					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
1 410	140.					Use-as-is	1		noforming	Finishing	-	re/Packaging	Other
NCR	No.					Work Order Update	1		Large Fab	Composite	1	Supplier	
							<u>ا</u>		υ Ш	• •			
Root					Descri	ption of work order update		Initial	А	ction	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator	Ш												
Material	Щ												
Setup													
Other	Ш							:					
Process													
Supplier	_											<u> </u>	
Training	Щ												
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Landi		2000				General	AUL	T CATE	GURT				
Lanui		Bending			·	Bend	<u> </u>	Grain		Γ	Ovalized		Pressure/Forced
	\vdash	Centre No	nt Concer	atric to		BOM/Route	-	Hardwa	re		Over/Under	tolerance	Temperature/Cure
	H	Cracks	e concer	ici ic to	o, s	Broken/Damaged	\vdash	1	ion Incomplete		Part Incorre		Weld
	\vdash	Crushed/0	Crimped			Burrs		1 '	ions Incomplete	·/Unclear	Part Lost/M		Wrong Stock Pulled
:	-	Cuffs	p-=			Contamination	-	Mainte	•		Part Moved	· _	_
	H	Heat Trea	t		<u> </u>	Countersink		Mislabe		 	Positioned \	Vrong	
	Inspection Strip in Tube			<u> </u>	Cut Too Short		Misread		<u> </u>	Power Loss	· —	Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

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Page 5

Start Date: 11/14/12

Required Date: 11/14/12

Start Qty: 2.00

Required Qty: 2.00

130	Each	10.0000	2	75	<u>SP</u>
Loc Qty		Loc Code			

48.0000

Loc Code

D3396±1	
Spacer	

Manufactured No

Manufactured

No

Location ST265

> 130 Each

10

83904

	Location	Loc Qty
	ST041	10
	82036	10
	ST044	38
	85612	38
No		130

122800

116704 120423 121657

ST356

52034

83904

643.0000 Each

82036



Purchased No

> Location Loc Qty Loc Code FG 103344 ST355

500 500 139

136

Each 35.0000





Purchased No

> Location Loc Oty Loc Code ST356 35

130

114523 25 120840 10

114523

												DQA:	Dat	te:	·
NCR:	Yes	/ No				WORK ORDER NON-O	201	NFOR	MANCE / UPI	DATE		-			
		·							_		(QA Closed:	Dat	te:	
Work Ord	or:					DISPOSITION				AGAINST D	ЕP	ARTMENT/	PROCESS		•
Work Ord	ei.					Rework	ן ו		Skid-tube	Crosstube	٦		Water Jet		Engineering
Part I	No				ŧ.	Scrap			Machining	Small Fab	┨	Proc	l. Eng. Coor.	-	Quality
raiti	V O.					Use-as-is	-	•	noforming	Finishing	┨		e/Packaging		Other
NCR	Nο					Work Order Update	1 1	,,,,	Large Fab	Composite	┨	1100,0101	Supplier		
ive.							J				_				l
Root					Descri	ption of work order update		Initial	Act	tion	Т	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	nief Eng	Descr	ription	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$	Date	Verification	n	QC Inspector
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Equip/Tooling									1					,	
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Material							1							1	
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						F.	AUL	T CATE	GORY						
Landi	ng (Gear				General		,			_		1	_	1
		Bending				Bend	<u></u>	Grain		<u>_</u>	-	Ovalized		匚	Pressure/Forced
	L	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa			'لـــ	Over/Under	tolerance	<u>_</u>	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		4	Part Incorrec	t	\vdash	Weld
· ·		Crushed/	Crimped.		1	Burrs		H				Part Lost/Mi	ssing	1	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Part Moved

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print Page 6 *September-13-12 2:15:57 PM Work Order ID: 90155 D412-630-033 Parent Item: **Start Date:** 11/14/12 Required Date: 11/14/12 Heli Access Step LH Folding Required Qty: 2.00 Parent Item Name: Start Qty: 2.00 130 No Each 68.0000 Purchased Location Loc Oty Loc Code ST338 38 3 118191 120422 120833 3 121162 11 121652 20 ST362 30 30 122416 No 130 Each 26.0000 Purchased Loc Oty Loc Code Location ST362 26 111308 120872 10 21693 15 121693 130 No Each 197.0000 Purchased Location Loc Qty Loc Code ST358 197 2 115835 118706 3 192 120360 Purchased No 130 Each 122.0000 1 Washer

 Location
 Loc Oty
 Loc Code

 ST277
 122

 117735
 1

 118078
 12

 118612
 9

50

121649

120770

121649

										DQA:	Date:	•
NCR: Y	es / No				WORK ORDER NON-	COI	VFOR	MANCE / UPDATE		QA Closed:	Date:	yb. **
					DISPOSITION			AGAINST	DE	PARTMENT/		,
Work Orde	er:				Rework	ן ר		Skid-tube Crosstube	.[_		Water Jet	Engineering
Part N	o				Scrap	1		Machining Small Fab		1	d. Eng. Coor.	Quality
NCR N	o				Use-as-is Work Order Update	_		noforming Finishing Large Fab Composite		Rec/Stor	e/Packaging Supplier	Other
Root				Descri	ption of work order update		nitial	Action		Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
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Other												
Process							!					
Supplier												į
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Landin	g Gear				General		_			_		-
	Bending				Bend		Grain		L	Ovalized		Pressure/Forced
	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
* [Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	:t	Weld
Ī	Crushed/	Crimped,			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	ssing	Wrong Stock Pulled
Γ	Cuffs				Contamination		Mainte	nance		Part Moved		
ľ	Heat Trea	t			Countersink		Mislabe	led		Positioned W	/rong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

* September-13-12 2.	:15:57 PM									Page /
Work Order ID: Parent Item: Parent Item Name:	90155 D412-630-033 Heli Access Step LH Folding						Date: 11/14/12 Qty: 2.00		Required Date	
NAS1515H5 Washer	Purchased	No		130	Each	171.0000	The second secon	14	13	-50
6		Locat	<u>ion</u>	Loc Qty		Loc Code			•	
φv		FG		25						
			103286	5						
			103691	20			11000000			
		GA		34						
\			120449	34						
		ST27	7	112			1204	49		
			120299	12						^
			121652	100						
MS21043-4	Purchased	No		130	Each	1,887.0000		8	28	12/10/0
		Locat	io <u>n</u>	Loc Qty		Loc Code			0	, , _
		FG		36						
			104603	36						
		ST30	l	376						
			119546	2						
			121162	13						
			121652	361						
		ST31:	5	500						
			123021	500						

975

975

122141

ST318

122141

											DQA:	Date:	<u>.</u>
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFOR	MANCE / UPI	DATE	•		
										· · · · · · · · · · · · · · · · · · ·	QA Closed:	Date:	
Work Ord	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	,
WOIK OIU	٠					Rework	7		Skid-tube	Crosstube	1	Water Jet	Engineering
Part I	No.					Scrap	1	•	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	•					Use-as-is	1	1	noforming	Finishing	4	re/Packaging	Other
NCR I	No.					Work Order Update	1		Large Fab	Composite]	Supplier	
								<u> </u>					
Root					-	ption of work order update	1	Initial		ion	Sign &		
Cause	.	Date	Step	Qty	C	or Non-conformance	Cr	nief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data	Ш					,					ļ		
Equip/Tooling	Ш												
Operator	Ш												
Material	Ш											:	
Setup						*					į		
Other	Щ												
Process	Ш												
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Training	Ш					•						:	
Unapproved	Ш						ļ				<u>l</u>		
							AUI	LT CATE	GORY				
Landi	$\overline{}$					General		,			7		7
	—	Bending				Bend	L	Grain		<u></u>	Ovalized		Pressure/Forced
	Ш	Centre No	ot Concer	itric to C)/S	BOM/Route		Hardwa	re		Over/Under	}	Temperature/Cure
	├ ──┩	Cracks				Broken/Damaged		4	on incomplete		Part Incorred		Weld
	Ш	Crushed/0	Crimped.		ļ	Burrs		Instruct	ions Incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	-	Cuffs				Contamination	\vdash	Mainte			Part Moved		
		Heat Trea	t			Countersink	L_	Mislabe	led		Positioned V		7
		Inspection	n Strip in	Tube		Cut Too Short		Misread	I		Power Loss/	Surge	Other
		Ripples in	Bend		-	Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

September-13-12 2:15:58 PM

, Work Order ID:

90155

Parent Item:

D412-630-033

Parent Item Name:

Heli Access Step LH Folding

Purchased

No

Start Date: 11/14/12

Required Date: 11/14/12

Start Qty: 2.00

677.0000

Required Qty: 2.00

Location	<u>l</u>	Loc Qty	Loc Code	
FG		20		
	101418	20		
ST300		4		
	112314	4		
ST301		653		
	116548	96		
	118159	. 17		
	119307	25		
	119537	116		119237
	121283	199		
	121584	200		· · · · · · · · · · · · · · · · · · ·

Each

130

										DQA:	Date	:
NCR:	Yes / No				WORK ORDER NON-C	CON	FORM	MANCE / UPDATE		•		
										QA Closed:	Date	<u> </u>
Maril Ond					DISPOSITION	ł		AGAIN	ST DE	PARTMENT/	PROCESS	•
Work Ord	er:				Rework	1		Skid-tube Crosstu	he		Water Jet	Engineering
Part N	No				Scrap	1		Machining Small F	-	Prod	d. Eng. Coor.	Quality
1 47 61					Use-as-is	1		noforming Finishi			e/Packaging	Other
NCR 1	No.				Work Order Update	1		Large Fab Compos	ite		Supplier	
Root				Descri	ption of work order update		nitial	Action		Sign &		
Cause	Date	Step	Qty	C	or Non-conformance	Chi	ef Eng	Description		Date	Verification	QC Inspector
Doc/Data		1										
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Material				,				•				
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Training		ł										
Unapproved		<u> </u>								<u> </u>	L	
					F	AUL1	CATE	GORY				
Landi	ng Gear			_	General					7	_	-
	Bending			<u> </u>	Bend	Н	Grain		-	Ovalized	_	Pressure/Forced
	Centre No	ot Conce	ntric to	o/s	BOM/Route	\vdash	Hardwa		<u> </u>	Over/Under		Temperature/Cure
	Cracks			ļ	Broken/Damaged	-	•	on Incomplete	<u> </u>	Part Incorred	 	Weld
	Crushed/	Crimped.		<u> </u>	Burrs	\vdash		ions Incomplete/Unclear	<u> </u>	Part Lost/Mi	ssing	Wrong Stock Pulled
Cuffs			Contamination	1 1	Mainte	nance		Part Moved				

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

D412-630-033/-034 Heli-Access-Step[™] Installation

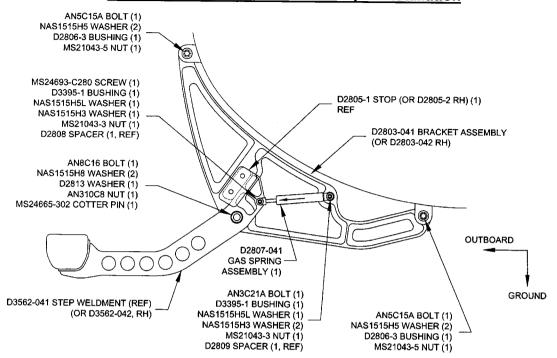


FIGURE 14 – STA 84.29 for D412-630-033/-034 Heli-Access-Step™ Installation (View rotated 90° CW)

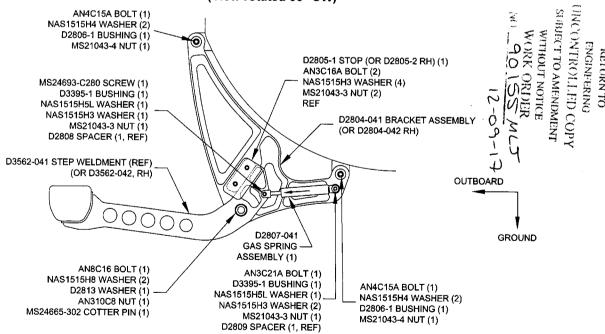


FIGURE 15 – STA 155.06 for D412-630-033/-034 Heli-Access-Step[™] Installation (View rotated 90° CW)

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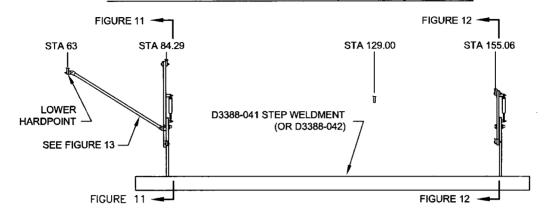
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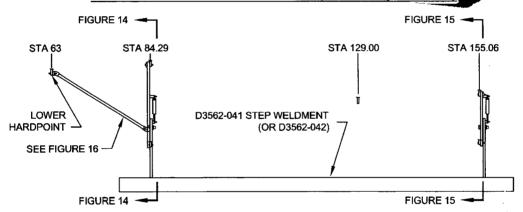
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D412-630-023 HELI-ACCESS-STEP™ LH, FOLDING (SHOWN) D412-630-024 HELI-ACCESS-STEP™ RH, FOLDING (OPPOSITE)



D412-630-033 HELI-ACCESS STEPTMLH, FOLDING (SHOWN) D412-630-034 HELI-ACCESS STEPTMRH, FOLDING (OPPOSITE)



D412-630-111 HELI-ACCESS-STEPTM LH, HEAVY DUTY FIXED (SHOWN) D412-630-112 HELI-ACCESS-STEPTM RH, HEAVY DUTY FIXED (OPPOSITE)

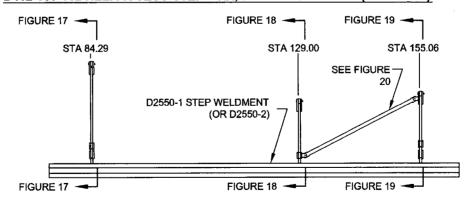


FIGURE 3 – D412-630 *Heli-Access-Step*[™] Installations

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Date: 08.12.12

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D412-630 Page 25 of 26



Qty	Qty -034	Qty -243	Qty -244	Part Number	Description
Х				D412-630-033	HELI-ACCESS-STEP™ LH (FOLDING)
	Х			D412-630-034	HELI-ACCESS-STEP [™] RH (FOLDING)
1		Х		D412-630-243	STEP ASSEMBLY LH
	1		Х	D412-630-244	STEP ASSEMBLY RH
		1	1	D2012-107	CLEVIS
		1		D2803-041	STA 84 BRACKET ASSEMBLY LH
			1	D2803-042	STA 84 BRACKET ASSEMBLY RH
		1		D2804-041	STA 155 BRACKET ASSEMBLY LH
			1	D2804-042	STA 155 BRACKET ASSEMBLY RH
/ 2	2			D2806-1	BUSHING
7.2	2	<u>, , , , , , , , , , , , , , , , , , , </u>		D2806-3/	BUSHING
		2	2	D2807-041	GAS SPRING ASSEMBLY (WAS D2807)
71	1			_D2810=5	STRUT
-		2	2	D2813	WASHER
		1		D3562-041	STEP WELDMENT LH
			1	D3562-042	STEP WELDMENT RH
		4	4	D3395-1	BUSHING
12	2			_D3396-1	SPACER
		2	_2	AN3C21A	BOLT
/1	1			-AN4C6A-	BOLT
7-1-	1			AN4C10A	BOLT
12	2			AN4C15A	BOLT
/_1	_1_			-AN44-C7A	EYEBOLT
12	2			_AN5C15A	-BOLT
		2	2	AN8C16	BOLT
		2	2	AN310C8	NUT
		2	2	MS24665-302	COTTER PIN (OR AN380C3-4)
		6	6	NAS1515H3	WASHER
(7_	7		· · · · · · · · · · · · · · · · · · ·	NAS1515H4	WASHER
77	7		I.	NAS1515H5	_WASHER
		4	4	NAS1515H5L	WASHER
		4	4	NAS1515H8	WASHER
		4	4	MS21043-3	NUT
/4	4			MS21043-4	้างบุ๋๋ >
L 3	3			MS21043-5	NUT
		2	2	MS24693-C280	SCREW (OR MS24694-C565)

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Date: 08.12.12